Design and Construction of A Smart Street Light System By Using Arduino Uno

Hnin Aye Khine¹, Thin Thin Thwe² and Khin Swe Oo³

Abstract

The prototype of a smart street light system is designed and constructed by using LDR and infrared sensor. The Arduino Uno is mainly used to control the whole system. LDR (Light Dependent Resistor) is used to determine the day or night time. LEDs are used as street lights. The street lights will be turned OFF in the day time. In the night time, the street lights will be glowed with the high intensity by detecting the IR sensor when the vehicle passes on the road, otherwise street lights will be remained dim. This system intends to reduce the large amount of power consumption and also reduce the manual operation.

Key words: street light system, IR sensor, Arduino Uno, automatic operation

^{1.} Lecturer, Dr., Department of Physics, Yangon University of Education

^{2.} Lecturer, Dr., Department of Physics, Yangon University of Education

^{3.} Pro-rector, Dr., Dawei University